

动物科学

杂交改良对撒坝猪肉品质的影响——肌肉食用品质及肌纤维特性分析

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摘要 研究选用24kg左右的去势撒坝猪及其约长撒三元杂交猪各7头, 根据基因型分成两组, 按活重变化分为3个试验期 (前: 20~35kg, 中: 35~60kg和后期60~90kg), 在同一试验期内饲喂同样的日粮进行饲养试验, 当活重达90kg进行屠宰试验, 研究杂交改良对云南省本地猪种撒坝猪肉品质和肌纤维特性的影响。撒坝猪通过杂交改良后, 生长速度和瘦肉率显著提高, 但其肉品质均有不同程度的下降。杂交后代肌肉水分显著地增加 ($P<0.01$), 相反, 肌肉粗蛋白 ($P<0.05$)、粗脂肪和肌内脂肪 ($P<0.01$) 显著地降低。杂交后代的系水率、保水率、肉色、嫩度等指标均有不同程度的下降 (差异不显著 $P>0.05$), 然而, 大理石纹、熟肉率、滋味、多汁性和汤味显著下降 ($P<0.05$)。肌纤维直径和密度变化较为显著。杂交后显著地降低了腰肌、股二头肌和背最长肌肌纤维密度 ($P<0.001$); 腰肌、股二头肌和背最长肌肌纤维密度分别降低了22.3%, 22.8%和19.3%。肌纤维密度降低的主要原因是杂交后显著地增加了腰肌、股二头肌和背最长肌肌纤维直径 ($P<0.01$); 腰肌、股二头肌和背最长肌肌纤维直径分别增加了22.5%, 18.1%和18.9%。

关键词 [撒坝猪](#); [肉品质](#); [肌纤维](#)

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Effect of Crossbred(genotype) Selection on the Meat Quality in Saba Pigs——Meat Quality and Fibre Characteristic

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Abstract

Seven Saba barrows and commercial hybrid barrows [Yorkshire ♂ × ♀ (Large White ♂ × Saba ♀)] weighing about 24kg were fed ad libitum the same feed during each experimental periods when pigs had LW in the ranges 20~35kg (Period I), 35~60kg (Period II) and 60~90kg (Period III) to investigate the effect of crossbred (genotype) selection on meat quality and muscle fibre characteristics. It has been shown that water content for meat of the hybrid was significantly higher than Saba pigs ($P<0.01$), in contrast, crude protein ($P<0.05$), crude fat and intramuscular fat ($P<0.01$) content for meat in the hybrid pigs were significantly lower than in the Saba pigs. Marbling score, ratio of cooled: fresh, flavour, juiciness and soup flavour of meat for hybrid were significantly lower than that of Saba pigs ($P<0.05$), and trends for lower colour score, tenderness, water drip loss and water holding capacity for hybrids compared to Saba pigs as well ($P>0.05$). The density of fibres in muscle was consistently and significantly lower for all muscle types in hybrid compared to Saba pigs ($P<0.001$). The density of fibres in muscle of loin, rump and *L. dorsi* was decreased by 22.3%, 22.8% and 19.3% respectively. In contrast, fibre diameter for hybrid swine was consistently and significantly greater than Saba pigs ($P<0.001$). The fibre diameter in muscle of loin, rump and *L. dorsi* were increased by 22.5%, 18.1% and 18.9% respectively.

Key words [Saba pigs](#); [meat quality](#); [muscle fibre](#)

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